

ABSTRACT

A method and system for use in the course of extracorporeal blood flow, e.g., cardiopulmonary bypass, dialysis, and angioplasty procedures, in order to reduce or minimize inflammation, excessive bleeding, and other undesirable side effects. The system can include one 5 or more automated blood parameter sensor modules and one or more blood parameter regulating modules. The system is particularly well suited to monitor and/or regulate blood parameters that include blood analytes (e.g., biomolecules, drugs or metabolites) as well as blood functions (e.g., clotting time, fibrinolytic activity, immune response). The system is particularly well suited for use in the management of clotting (e.g., heparin/protamine) and bleeding (e.g., aprotinin).